New Names in *Papaver* Section *Meconella* (Papaveraceae)

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ABSTRACT. Two combinations (*Papaver macounii* subsp. *discolor* and *P. radicatum* subsp. *kluanensis*) and a subspecies (*P. nudicaule* subsp. *americanum)* are published.

To complete a treatment of the scapose poppies (section *Meconella* of *Papaver*) for *Flora of North America*, it is necessary to publish one new combination and to validate one combination and a subspecies that have been previously proposed, but not in compliance with the *International Code of Botanical Nomenclature* (Greuter et al., 1994).

Papaver macounii subsp. **discolor** (Hultén) Rändel ex D. F. Murray, stat. nov. Basionym: *Papaver macounii* var. *discolor* Hultén in Hultén, Fl. Alaska Yukon 5: 803. 1945. TYPE: U.S.A. Alaska: Nome, *Anderson 3250* (holotype, S).

This combination was made by Rändel (1977: 425) without a full and direct reference to the basionym's author and place of valid publication as required by Article 32.2 (Greuter et al., 1994), which I have now supplied.

Papaver nudicaule subsp. **americanum** Rändel ex D. F. Murray, subsp. nov. TYPE: [Canada.] Klotassin area Yukon T[erritory], SW of Yukon River, between Selkirk and White River, Aug. 1916, *D. D. Cairnes 91890* (holotype, CAN).

Rändel (1977: 437) determined that the specimens from Alaska and Yukon represented a taxon distinct from the Asiatic material she had studied. She proposed *Papaver nudicaule* subsp. *americanum*, for which she supplied a diagnosis but failed to select a type as required by Article 37.1 (Greuter et al., 1994). As holotype I have chosen a specimen complete with leaves, flowers, and fruits, which Rändel had seen and annotated as subspecies *americanum*.

Papaver radicatum subsp. **kluanensis** (D. Löve) D. F. Murray, comb. et stat. nov. Basionym: *Papaver kluanensis* D. Löve in Löve & Freedman, Bot. Not. 109: 178–180. 1956. TYPE: [Canada]. Yukon [Territory]: N of Quill Creek camp, 20 mi. W of Burwash landing, alt. ca. 5000 ft., 19 June 1953, *Freedman s.n.* (holotype, MAN).

Doris Löve described *Papaver kluanensis* based on specimens from southwestern Yukon, which she later (1969) showed to be more widely distributed southward along the Rocky Mountains. Whereas she maintained this taxon as distinct from the Utah populations in this complex, I am, at least for the time being, including them within *P. radicatum* as subspecies *kluanensis*. Specimens of subspecies *kluanensis* from the type locality and elsewhere in the very northern part of its range are taller, with larger flowers and ellipsoid-subglobose capsules. Plants from the southernmost part of the range (Colorado, Utah, and New Mexico) are consistently shorter, with smaller flowers and oblong-obconic capsules. Taken alone, the Utah specimens are uniform and distinct; nevertheless, I agree with Rändel (1975) that the northern and southern populations are linked in Colorado and Wyoming by intermediate forms.

Welsh (1986) has applied the name *Papaver radicatum* var. *pygmaeum* (Rydberg) Welsh to the Utah specimens that I have determined as *P. radicatum* subsp. *kluanensis*. I view *P. pygmaeum* as morphologically distinct from the *P. radicatum* complex, being more closely related to the European *P. alpinum* group and different from the Utah plants in several respects. *Papaver pygmaeum* has leaves sparsely strigose to commonly glabrous, leaf lobes short and orbicular, and capsules with whitish (ivory) trichomes, whereas *P. radicatum* subsp. *kluanensis* has leaves coarsely strigose, lobes obovate, and capsules with light (straw colored) to dark brown trichomes.

Papaver pygmaeum is a diploid ($2n = 14$; Packer, 1968). Fabergé (1942, 1944) applied the name *P. pygmaeum* to a specimen from which he obtained a chromosome count of $n = 21$. The origin for this material was given by Fabergé as "Pike's Peak Utah." Clearly, this count was actually derived from a specimen of *P. radicatum* subsp. *kluanensis* from Pike's Peak, Colorado, sent to Fabergé by [W. P.] Cottam from his home base in Utah. *Papaver radicatum* subsp. *kluanensis* has a chromosome number of $2n = 42$ (Löve, 1969, based on Colorado material) or $2n = 56$ (fide Moss & Packer, 1983, based on material from Alberta).

Acknowledgments. My thanks to Robert Kiger and John McNeill for reviewing the manuscript and for suggesting improvements; and to the curators of CAN, MAN, NY, and S for loans or their many courtesies during visits to view types and other specimens.

Literature Cited

Fabergé, A. C. 1942. Genetics of the *Scapiflora* section of *Papaver* 1. The garden Iceland poppy. J. Genetics 44: 169–193.

———. 1944. Genetics of the *Scapiflora* section of *Papaver* 3. Interspecific hybrids and genetic homology. J. Genetics 46: 125–149.

Greuter, W., F. R. Barrie, H. M. Burdet, W. G. Chaloner, V. Demoulin, D. L. Hawksworth, P. M. Jørgensen, D. H. Nicolson, P. C. Silva, P. Trehane & J. McNeill, Editors. 1994. International Code of Botanical Nomenclature (The Tokyo Code), Adopted by the XVth International Botanical Congress, Yokohama, August–September, 1993. Regnum Veg. 131.

Löve, D. 1969. *Papaver* at high altitudes in the Rocky Mountains. Brittonia 21: 1–10.

Moss, E. H. & J. G. Packer. 1983. Flora of Alberta, ed. 2. Univ. Toronto Press, Toronto.

Packer, J. G. 1968. IOPB chromosome number reports XVII. Taxon 17: 285–288.

Rändel, U. 1975. Die Beziehungen von *Papaver pygmaeum* Rydb. aus den Rocky Mountains zum nordamerikanischen *P. kluanense* D. Löve sowie zu einigen nordost-asiatischen Vertretern der Sektion *Scapiflora* Reichenb. im Vergleich mit *P. alpinum* L. (Papaveraceae). Feddes Repert. 86(1–2): 19–37.

Rändel, U. 1977. Über Sippen des subarktisch-arktischen Nordamerikas, des Beringia-Gebietes und Nordost-Asiens der Sektion *Lasiotrachyphylla* Bernh. (Papaveraceae) und deren Beziehungen zueinander und zu Sippen anderer Arealteile der Sektion. Feddes Repert. 88(7–8): 421–450.

Welsh, S. L. 1986. New taxa and combinations in the Utah Flora. Great Basin Naturalist 46: 254–260.